## IN THE CLAIMS

Claim 1 (Currently amended). A method of inducing production of isoflavones in a plant comprising:

applying to the surface of at least part of a plant capable of producing an isoflavone, a biologically effective amount of a composition comprising a nuclear receptor ligand, wherein said nuclear receptor ligand is

a peroxisome proliferator having structure V below,

V

Wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings.
R11 is an O or S,

R12 is a branched or linear aliphatic chain comprising 1-8 carbons,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms.

Claims 2-9 (Withdrawn).

Claim 10 (Canceled).

Claim 11 (Currently amended). The method of claim 101 wherein the peroxisome proliferator is selected from the group consisting of clofibric acid, ciprofibrate, and 2-(o-chlorophenoxy)-2-methylpropionic acid (CPMPA).

- Claim 12. (Currently amended) A method of inducing disease resistance in a plant comprising applying to the surface of at least part of a plant capable of producing an isoflavone, a biologically effective amount of a composition comprising:
- a) a nuclear receptor ligand, wherein said nuclear receptor ligand is a peroxisome proliferator having structure V below,

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## O || R10-R11-R12-C-OR13

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Wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings, R11 is an O or S,

R12 is a branched or linear aliphatic chain comprising 1-8 carbons,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms;

and

b) one or more compounds that enhance the release of isoflavones from a sugar conjugate, enhance the incorporation of aglycones into glyceollin, or enhance the release of isoflavones from a sugar conjugate and incorporation of aglycones into glyceollin.

Claim 13 (Withdrawn).

Claim 14 (Original). The method of claim 12 wherein the enhancing compound is a copper salt or a fragment of the naturally occurring cell wall glucan from the pathogen *Phytophthora sojae*.

Claim 15 (Original). The method of claim 1 wherein the composition further comprises one or more compounds selected from the group consisting of a phytologically acceptable diluent or adjuvant.

Claim 16 (Original). The method of claim 1 wherein the composition further comprises one or more active chemicals selected from the group consisting of a herbicide, an insecticide, a fungicide, and a bacteriocide.

Claim 17 (Original). The method of claim 1 wherein the composition is applied to the plant stem, the plant root, the plant leaf, or combinations thereof.

Claim 18 (Original). The method of claim 1 wherein the composition is applied to a seed or a seedling.

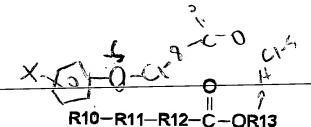
Claim 19 (Original). The method of claim 1 wherein the composition is applied to a legume selected from the group consisting of alfalfa, lima bean, pinto bean, chickpea, peanuts, and soybean.

Claim 20 (Original). The method of claim 19 wherein the legume is soybean.

Claim 21. (Currently amended) A composition for inducing disease resistance in a plant or seed, comprising:

(a) one or more nuclear receptor ligands, wherein said nuclear receptor ligands are peroxisome proliferators having structure V below.

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Wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings.

R11 is an O or S,

R12 is a branched or linear aliphatic chain comprising 1-8 carbons,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms;

and

(b) one or more enhancing compounds which enhance the release of isoflavones from a sugar conjugate in the plant or seed, enhance incorporation of aglycones in the plant or seed into glyceollin, or enhance release of isoflavones from a sugar conjugate in the plant or seed and incorporation of aglycones in the plant or seed into glyceollin.

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Claim 23 (Previously amended). The composition of claim 21 wherein the enhancing compound is a copper salt or a fragment of the naturally occurring cell wall glucan from the pathogen *Phytophthora sojae*.

Claims 24-43 (Withdrawn).